In 2013 CTR focused on research in to the two research programs Textile Economies in the Mediterranean Area (TEMA) primarily placed in University of Copenhagen and Textile Crafts and Cultures (TECC) primarily placed at the Danish National Museum, but also embarked on new projects with new goals.

The staff in 2013 consisted of one director (Marie-Louise Nosch), twelve researchers (Ulla Mannering, Eva Andersson Strand, Karin Margarita Frei, Mary Harlow (UK), Hedvig Landenius-Enegren (SE), Ellen Harlizius-Klück (DE), Berit Hildebrandt (DE), Miguel Ángel Andrés-Toledo (ES), Malgorzata Siennicka-Rahmstorf (PL), Joanne Cutler (UK), Paula Hohti (FI), Salvatore Gaspa (IT)); Mette Bruun as coordinator and PA for Nosch; six PhD scholars (Lone Gebauer Thomsen, Luise Ørsted Brandt, Vivi Lena Andersen, Charlotte Rimstad, Karolina Huttikova and Cecile Brons), and other scholars employed/or affiliated for 1-12 months at CTR: Cherine Munkholt as editor; Christina Olsen as lab assistant; Lena Erdnüss (DE) as editorial assistant; Ida Demant and Peder Flemestad as research assistants; Anna Rosa Tricomi (IT), Maciej Szymaszek (PL), Christoph Kremer (DE), Kim Tae Yeon (KR), Cai Xin (CN), Luise Quillien (FR), Maria Peset (ES) and Wu Manlin (CN) as visiting PhD scholars; Cassandra Schroder Holm, Ugzona Haxha, Niels Moldrup Petersen, Sidsel Frisch, Camilla Ebner, Martin Andersen, Camilla Toft Sorensen, Ulrikka Mokdad, Julie Bjorg Raith, Stine Marie Botton and Ziff Joncker as student assistants; Christian Schmidt as intern. Several guest scholars worked with us for shorter periods: research director Cécilie Michel (FR), Anne Regourd, researcher (FR), Lorenz Rahmstorf, researcher (DE), Joan Pinar Gil, researcher (ES) Giovanni Fanfani, researcher (SE), emerita prof. Ulla Lund Hansen (DK), Susanne Lervad, Term Plus (DK), Mashu Poulsen, assistant (DK), Camilla Luise Dahl, researcher (DK), Laila Glienke, MA student (DK).

From the National Museum of Denmark the conservators Irene Skals, Anne Lisbeth Schmidt and Maj Ringgaard, photographer Roberto Fortuna, and curator Mikkel Venborg Pedersen contributed to CTR research.

In addition, numerous collaborators from Europe, USA, Canada, Israel, India, Syria, Jordan, China, Corea, Australia and Russia contributed to CTR research.

CTR arranged in 2013 15 international seminars and conferences in 2013, and CTR scholars have given a total of 84 lectures at international conferences in 18 countries (see appendix B). CTR staff also gave 36 interviews in different Danish electronic media and contributed to articles in Danish and foreign newspapers, and made 26 outreach presentations.

In 2013, CTR staff and collaborators produced 77 publications: 11 papers in journals, 11 papers in conference proceedings, 25 book chapters, 27 other types of publications, 2 books and in addition edited 29 book chapters and 1 issue of the journal ATR.

The total publication productivity 2005-2013 is thus:

<table>
<thead>
<tr>
<th>Total number of publications:</th>
<th>2005-2013</th>
<th>Peer reviewed</th>
<th>Non-peer reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of journal articles</td>
<td>86</td>
<td>65</td>
<td>21</td>
</tr>
<tr>
<td>Number of conference series*</td>
<td>62</td>
<td>41</td>
<td>21</td>
</tr>
<tr>
<td>Number of books*</td>
<td>29</td>
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<td>4</td>
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<tr>
<td>Number of book chapters</td>
<td>285</td>
<td>266</td>
<td>19</td>
</tr>
<tr>
<td>Research reports on web site</td>
<td>39</td>
<td>39</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>107</td>
<td>38</td>
<td>69</td>
</tr>
</tbody>
</table>

* number of articles in conference proceedings

* this number includes monographs and anthologies edited by CTR

In May CTR co-organized an international conference in Lecce, Italy on *Treasures from the Sea: Sea-silk and Shell Purple Dye in Antiquity*, with 23 scholars from 12 different countries.

CTR welcomed 7 Marie Curie mobility grant scholars: Salvatore Gaspa (IT), Miguel Ángel Andrés-Toledo (ES), Berit Hildebrandt (DE), Malgorzata Siennicka (PL), Paula Hothi (FI), Matteo Vigno (IT) and Joanne Cutler (UK), and two new PhD students: Charlotte Rimstad and Vivi Lena Andersen.

A group of CTR researchers and collaborators went to Nuuk, Greenland to teach at the University of Greenland, and during the stay several textile workshops, conferences and public outreach events were organized.

In 2013 CTR has organized 15 conferences and workshops in 5 different countries. In April a group of CTR researchers and collaborators co-organized the international conference *Wool on the Silk Road* at the China National Silk Museum (CNSM) in Hangzhou, China. The conference was part of the collaboration on *Textiles in Eurasia in the Bronze Age: From Scandinavia to China* between CTR and CNSM.

CTR Director Marie-Louise Nosch received the prestigious German Anneliese Maier Research Award from the Alexander von Humboldt Foundation. The prize included €250,000 which will be used to strengthen Danish-German research relations and future collaborative research projects.

I maj var forskere fra CTR med til at arrangere en international konference i Lecce i Italien om Treasures from the Sea: Sea-silk and Shell Purple Dye in Antiquity, med 23 forskere fra 12 forskellige lande.

I 2013 påbegyndte 7 forskere deres Marie Curie mobility grant på CTR: Salvatore Gaspa (IT), Miguel Ángel Andrés-Toledo (ES), Berit Hildebrandt (DE), Malgorzata Siennicka (PL), Paula Hothi (FI), Matteo Viggio (IT) og Joanne Cutler (UK). Herudover er to nye ph.d. stipendiater påbegyndt deres studier på CTR: Charlotte Rimstad og Vivi Lena Andersen. En gruppe af CTRs forskere tog i efteråret til Nuuk i Grønland for at undervise på Grønlands Universitet. I løbet af opholdet blev der arrangeret flere tekstilworkshops, konferencer og foredrag.

I 2013 har CTR organiseret 15 konferencer og workshops i 5 forskellige lande. I april var en gruppe af CTRs forskere og samarbejdsparterne medarrangører af den internationale konference Wool on the Silk Road ved China National Silk Museum (CNSM) i Hangzhou i Kina. Konferencen er en del af forsknings Samarbejdet om Textiles in Eurasia in the Bronze Age: From Scandinavia to China mellem CTR og CNSM.

I 2013 modtog centerleder Marie-Louise Nosch den prestigefyldte tyske Anneliese Maier Research Award fra Alexander von Humboldt Foundation. Prisen på € 250.000 vil blive brugt til at styrke dansk-tysk forskningssamarbejde og igangsatte nye forskningsprojekter.
**TEXTILE ECONOMIES IN THE MEDITERRANEAN AREA (TEMA) (2010-2016)**

TEMA is directed by Nosch and gathers experts from ancient history, archaeology, philology, terminology, hittitology, assyriology and weaving. TEMA consisted in 2013 of Harlow, Andersson Strand, Landenius, Harlizius-Klück, Fanfani, Mokdad, Haxha, Brøns, Lervad, Andrés-Toledo, Vigo, Hildebrandt, Siennicka, Gaspa, Cutler, Flemestad, Kremer, Firth and Quillien.

**Scientific focus areas in 2013**

The TEMA group has built up a solid research platform with regular meetings where current projects, research and plans are discussed; on-going work is peer reviewed and joint papers and projects developed. In 2013 the team was strengthened by several new Marie Curie fellows, who are highly experienced and have expert knowledge highly relevant for the group. Joint activities such as publications, conferences and workshops have contributed to consolidate the group.

Nosch received an Onassis fellowship and spent several months in Greece. Several TEMA groups member came to Greece to do joint research projects: Harlow and Nosch edited scholarly papers together in May; Harlizius-Klück and Nosch taught a summer school course in the International Hellenic University in Thessaloniki in July; Brøns and Nosch discussed Brøns' PhD chapters in August in Athens; Nosch and Firth worked together on Linear B inscriptions in Athens in September; Nosch and Irene Skals conducted field work with Greek colleagues in October. A comprehensive assemblage of sub-Mycenaean textiles was discovered in three cauldrons from a Greek cemetery, and a joint paper will be published in 2014.

Nosch was awarded the Anneliese Maier Prize by the Alexander von Humboldt Foundation of 250,000 € for collaboration projects with German research institutions, in particular Hannover University. The Prize was awarded at a ceremony at the Goethe University of Frankfurt in September by the German secretary of state for research and the president of the Humboldt Foundation. At this occasion, Nosch gave a public lecture on “Investigating the Mycenaean Bronze Age through Linear B Inscriptions and Experimental Archaeology.” The generous grant will enable CTR to build up new research programmes with German colleagues, such as a double PhD degree 2014-2016 in ancient history, two postdoc grants, travel grants for students between Denmark and Germany, translations and joint conferences.

To demonstrate the potential of interdisciplinary textile research, Nosch, Harlow, Michel and Hildebrandt edited three anthologies in 2013, with contribution by young and senior scholars, to appear in 2014:


TEMA group members have lectured in conferences in France, Germany, Austria, Spain, Greece, Czech Republic, Poland, Sweden, Lithuania, Italy, Jordan, China, Switzerland, and the UK. TEMA group members have organized the following conferences:

- *Treasures from the Sea: Sea-silk and Shell Purple Dye in Antiquity*, 26th-28th May, Dept. of Cultural Heritage at the Università del Salento in Lecce, Italy. Convened by Landenius Enegren and F. Meo. 25 Lectures, as well as experimental sessions with crafts people demonstrated how murex dye and sea silk was processed and used in antiquity. Publication scheduled for 2015.
- *Spinning Fates and the Song of the Loom: the use of textiles, clothing and cloth production as metaphor, symbol and narrative device in Greek and Latin literature*, 6th-7th June, CTR. Convened by Nosch, Fanfani and Harlow. 15 lectures illustrated how textiles can become powerful metaphors in ancient poetry and work as a new key to read ancient literature.
- TOTH workshop: *Verbal and non-verbal representation in terminology*. 8th November, CTR. Convened by Lervad. 12 lectures. The TEMA team, Vigo, Andrés-Toledo, Flemestad, Nosch, Gaspa, gave a joint lecture about how textiles are recorded graphically in various script systems, as words, abbreviations and logograms.
- *Textiles and Cult in the Mediterranean Area in the first Millennium BC*, 21st-22nd November, CTR and the National Museum of Denmark. Convened by Brøns and Nosch, with contributions by Landenius Enegren, Gaspa and Andrés-Toledo. 22 lectures. The lectures surveyed textile votive gifts, priestly clothes, and the role of textiles
in rituals in Greek, Roman, Jewish, Zoroastrian, Neo-Babylonian and Neo-Assyrian cults, and the existence of sacred textile production was debated.

First Textiles
In 2013 Siennicka initiated a new collaborative research project focusing on Neolithic and Early Bronze Age textile production. Milestones are a session organised by Siennicka in the European Archaeologists’ Association (EAA) meeting in Istanbul September 2014 and a conference at CTR in 2015, as well as joint publications and collaboration with the Berlin TOPOI Exzellenz cluster /Textile Revolution in Freie Universität.

Programme international de Coopération Scientifique (PICS) TexOrMed (2010-2014)
A significant PICS activity in 2013 was the study of textile and basketry imprints sealings (*bullae*) from Kültepe in Turkey by Cécile Michel and Andersson Strand. The project also includes Catherine Breniquet at Université Clermont-Ferrand 2 and Fikri Kulakoğlu from Ankara University. At Kültepe archaeological textile remains are extremely rare because of the climate but textile imprints on unfired clay allow identification of spinning and weaving techniques, and in some instances identification of fibres. Of the 1000 registered bullae, c. 15% showed imprints of textiles, 10% of cordages, 15% of strings, 2% of wood, and more than 50% imprints of basketry. The thread is generally quite thin (0.3 to 0.4 mm), but thicker threads were also observed (0.7 to 0.8 mm). Various weaving techniques like tabby and 2/1 twill were documented. The study will continue in 2014, and the results will be presented at the EAA in September 2015, at the 2nd Kültepe International Meeting, and in joint papers.

TEXTILE CRAFTS AND CULTURES (TECC) (2010-2016)
TECC is directed by Mannering and gathers experts from prehistoric archaeology, conservation, geochemistry and ancient DNA. TECC consisted in 2013 of Frei, Andersson Strand, Skals, Schmidt, Fortuna, Demant, Gebauer Thomsen, Olsen, Ørsted Brandt, Rimstad, Andersen, Lund Hansen. There were intense collaborations with archaeologist Lene B. Frandsen (Varde Museum), fibre expert Antoinette Rast Eicher from Switzerland, Margarita Gleba from UCL, Bodil Holst from University of Bergen, and Prof. Kristian Kristiansen, University of Gothenburg and the researchers employed in the ERC advanced grant *The Rise. Travels, transmissions and transformations in temperate northern Europe during the 3rd and 2nd millennium BC: the rise of Bronze Age societies*.

Scientific focus areas in 2013
In 2013, research was focused on dissemination of results and continued work on the Bronze Age textile collections, with sampling, documentation and analysis of textiles at the National Museum of Denmark. The work with improving and interpreting the fibre analysis of Danish Bronze Age wool was supported by the Ministry of Culture. The collaborative work has resulted in a paper about species identification submitted to the open-access journal PlosOne and two more articles about Early Scandinavian wool fibre development are in preparation. In the Lønne Hede Textile Project, Frandsen and Demant continued analysis and documentation of the graves excavated in 1969 and 1995, funded by KUAS’ Rådighedssum. We also tested insulating and thermal capacities of wool, linen and nettle fibres in collaboration with Holst, and the results will be submitted to an A-journal in 2014.

In September, Andersson Strand, Mannering and Frei worked on the textile tools from *The Farm Beneath the Sand*, Greenland. It is a well preserved settlement dated to the early mediaeval period where more than 800 textile tools were found (parts of 3 different looms and many loom weights, spindle whorls and needles). The project is conducted in collaboration with senior researcher Jette Arneborg from the National Museum of Denmark and the National Museum of Greenland.

The TECC group conducted two MA courses at the University of Copenhagen and Ilisimatusarfik, University of Greenland about *North Atlantic and Scandinavian costumes. Skins, textiles and resources in Viking and early Medieval periods* in collaboration with associate professor Thorkild Kjærgaard. The first course was held in KU in English with
participation of several international students. The second course was held in the autumn and included a week of intensive teaching in Nuuk where an excursion, several textile workshops, conferences and public outreach events were organized. Subsequently the Greenlandic MA-students visited Copenhagen for further lectures and museum visits.

The TECC team hosted an outreach seminar at the National Museum of Denmark, with participation of approximately 100 researchers and students from Danish and Nordic museums and universities. The seminar presented new results in the TECC research programme and demonstrated the potential of the textile research in an Scandinavian archaeological perspective.

Ulla Isabella Zagal-Mach Wolfe (PhD student at CTR 2006-2009) was awarded her PhD in archaeology at the University of Lund for the thesis Grasping Technology, Assessing Craft. Developing a Research Method for the Study of Craft-Tradition.

Mannering and Schmidt participated in the concept development of the next large temporary exhibition at the National Museum of Denmark entitled Pels. Liv og Død, which will open on the 4th of October 2014. The idea and scientific content in this exhibition has its off set in the TECC and Northern Worlds research results. We have given inspiration to and worked with several important exhibition proposals and outreach projects at the National Museum of Denmark.

**Costumes, Clothing, Consumption, and Culture = Early Modern Textiles**

Paula Hohti initiated a new collaborative research project on early modern textile cultures with special emphasis on Scandinavia based on her Marie Curie research project Global Encounters: Fashion, Culture and Foreign Trade in Scandinavia, 1500-1630. The collaboration also includes Venborg Pedersen from the National Museum of Denmark who published in 2013 his monograph on the study of colonial influences into Danish everyday life and consumption in the 18th century: Luxus. Forbrug og kolonier i Danmark i det 18. århundrede. This research area also embraces a new generation of five young PhD students working at or affiliated to CTR: at CTR Rimstad (Renaissance Clothes of Copenhagen) and Andersen (Between cobbles, bunions, shoe last and fashion. An appropriation and adaption analysis of footwear from the Middle Ages, Renaissance and Absolutism from archaeological excavations in Copenhagen), Hutkova in Warwick University (Seventeenth and Eighteenth-Century Asian Textiles in Europe and North America), Toolika Gupta in Glasgow University (The effect of British Raj on Indian fashion. Clothing and Textile preferences of the Early Twentieth Century), and Vibe Maria Martens in the European University in Florence (Indian textiles in seventeenth- and eighteenth century Denmark: Colonialism and the Rise of a Global Consumer Culture). Hohti arranged several meetings with the PhD students where they have presented their research and discussed with senior scholars. Hohti’s blog on how to conduct textile research in Copenhagen has more than 4000 readers: [http://earlymodernscandinavianfashion.wordpress.com/](http://earlymodernscandinavianfashion.wordpress.com/).


**CTR AND CHINA**

Since 2009, CTR has had an intensive collaboration with Director, Prof. Feng Zhao from China National Silk Museum (CNSM) and Donghua University. This includes editing of Global Textile Encounters: China – India – Europe, an educational anthology containing c. 30 well-illustrated articles written by international textile scholars. The book is co-edited by Nosch, Zhao and Dr. Lotika Varadarajan from the National Museum in New Delhi, India. It will be published in English and in Chinese by Donghua University Press. Two Chinese PhD students Wu Manlin and Cai Xin stayed at CTR in 2013. Nosch is member of the CNSM scientific board (2013-2015). In April the TECC group participated in the international conference on Wool on the Silk Road held at CNSM in Hangzhou. During the conferences, the exceptional wool finds from archaeological excavations in Denmark and China were compared and potentials for new methodologies evaluated. At the same time an exhibition with the fantastic well preserved textile finds from the Small River Cemetery in the Xinjiang province was opened. Based on this Danish-Chinese collaboration it was agreed that that a selection of these textile finds will be exhibited at the National Museum of Denmark in a small temporary exhibition 2015/2016.
MARIE CURIE MASTER CLASS 2013

CTR has since 2011 hosted a master class aiming at attracting talented European scholars to CTR and the University of Copenhagen. This year's master class was arranged by Nosch and Fanfani, and was attended by 12 candidates from Germany, Greece, USA, Italy, France, Spain and Israel. To support their application, they received expert guidance on the application process from university consultants and EU consultants, and were closely monitored by CTR staff, with one-to-one mentoring and peer review sessions with experts of their field. Ten applications for Marie Curie mobility grants were submitted, and all ten candidates were acknowledged as highly qualified (scores between 84 and 96). Three scholars received funding from FP7 while a fourth received the FP7 Marie Curie funding through a Mobilex grant from Denmark. They will join CTR in 2014. The CTR Marie Curie master class model is now being copied in other faculties at the University of Copenhagen and University of Southern Denmark. Universities in the UK and CNRS in France have asked for advice setting up similar master classes.

ADMINISTRATIVE AND STRUCTURAL CHANGES

CTR moved in 2013 into new and larger premises at Amagerfælledvej 56 just behind the university campus. The move coincided with the welcoming of new Marie Curie mobility grant scholars moving to Denmark, which has increased CTR's budget and staff with 50%. This expansion required new structures for management and administration: an executive group consisting of Nosch, Mannering and Andersson Strand, and a larger management board including those who assume larger responsibilities for CTR research in 2014: Frei, Bruun, Gaspa, Vigo, Fanfani, Siennicka, Hohti. One week was dedicated to a boot camp where new and old staff members presented their research, laid out new plans and schedules, and settled on four pillars defining CTR research and commitments 2014-2016. A new collaboration agreement was signed between CTR and the Saxo Institute, and with the National Museum, and Frei's employment was moved to the National Museum to build a platform for strontium isotope analysis in the museum.

CONCLUSION

CTR's major milestones and achievements for 2013 were:
2. Launching two new CTR collaborative research projects: First Textiles and Costumes, Clothing, Consumption, and Culture
3. Launching a new five-year research program with Universität Hannover and other German institutions thanks to the Anneliese Maier grant of the Alexander von Humboldt Foundation.

Ved underskriften bekræftes det, at beretning og regnskab med tilhørende noter og oversigter indeholder alle relevante oplysninger, som vedrører årets primære aktiviteter i Danmarks Grundforskningsfonds Center for Tekstilforskning

March 2014

Marie-Louise B. Nosch, Director